SEA LAMPREY CONTROL GENERAL INFORMATION

Program Background-
In 1972, NY and Vermont initiated joint efforts to develop a salmon and trout fishery and restore these two native species in Lake Champlain. Intensive assessment studies concluded sea lampreys (a parasitic fish) were a significant obstacle preventing the full development of trout and salmon fisheries. Sea lampreys were thus reducing recreational potential and its associated economic benefit to the area.

Lake Champlain sea lamprey management began in 1990 when the Lake Champlain Fish and Wildlife Management Cooperative made up of New York Department of Environmental Conservation, Vermont Department of Fish and Wildlife, and the U.S. Fish and Wildlife Service, began an eight-year experimental sea lamprey control program. During the experimental program, infestations of larval (immature) sea lamprey in selected streams and delta areas were treated with chemical lampricides. (A delta is an area in the lake where sediments have been deposited at the mouth of a river.)

An evaluation of the experimental control program showed it was effective at reducing sea lamprey populations and provided a net economic benefit to the area. State and federal environmental impact analyses of the program were then completed, permitting sea lamprey control to continue. An integrated, long-term approach for sea lamprey control in Lake Champlain was selected to allow the program greater flexibility, permitting expansion into new locations, as well as the use of additional non-chemical control techniques. Currently the U. S. Fish and Wildlife Service (USFWS) administers the sea lamprey control program on Lake Champlain with support from the states of New York and Vermont. The program continues to suppress lamprey populations leading to enhanced conditions for several important fish species; including salmon, trout, whitefish, burbot, and sturgeon.

Control Methods-
Two different chemicals (known as lampricides) are used to control the sea lamprey. The trade name of the chemical to be used in streams is TFM-HP, whose active ingredient is TFM. On the lower river and delta areas, the control chemical is Bayluscide®, whose active ingredient is Niclosamide. A third type of treatment utilizing a combination of lampricides may be used In order to reduce the amount of lampricide used in certain large-river treatments. A small amount of Bayluscide® added to TFM increases the TFM's potency, thus reducing the overall amount of lampricide used and possibly shortening the associated water use advisories. Combination-type treatments may be used on the following rivers: Great Chazy, Saranac, Ausable, Boquet, and Poultney. Labels for each formulation can be viewed online at: *http://www.fws.gov/LCFWRO/landowner.html*

Both TFM and Bayluscide® are used to kill larval sea lampreys before they mature to the parasitic stage and begin feeding on host fish in the lake. The intent of this program is to limit sea lamprey numbers by using periodic control treatments in tributaries where reproduction occurs. Complete elimination of the sea lamprey population is not likely feasible.

Project Area and Duration-
Our records indicate that you are a landowner within an area where Bayluscide® and/or TFM may be present in the stream or lake water for a short period following certain lampricide applications. Each delta and stream area will be treated as deemed necessary by the Lake Champlain Management Cooperative. It is expected that most deltas and rivers will be treated once every 4 years. However, larval sea lamprey population monitoring, or programmatic improvements may dictate more or less frequent treatments. Generally, this means most water-users may be affected one or two years out of every four, depending upon their location. Excessively high or low lake levels or stream flows and adverse weather may delay treatments. In some cases, these events may cause a treatment to be delayed until the following year. The proposed schedule of delta and stream treatments for the next two cycles of treatments is attached for your reference. You may note the current effort to conduct control operations on a regional basis. From 2011-2014 we will be working to establish two treatment zones in New York, one North and one South. From 2014 into the future, we anticipate treating streams in each zone during the same year once every 3-4 years. This approach will take advantage of the lampreys spawning behavior in an attempt to concentrate spawning populations in regions scheduled for treatment in coming years. It will also concentrate control activities so that the program can save staff time and travel costs. After 2014 we anticipate returning to a 3-4 year cycle of treatments based on larval lamprey growth rates. Control treatments will generally take place after Labor Day and before November 15th. Note that on certain streams, treatments may be conducted the following spring if we are forced to delay a scheduled fall treatment (see attached tentative treatment schedule). **-OVER-**

Water Use Restrictions-
Although lampricide concentrations in the water will be very low, you should be aware that there will be water-use restrictions in effect during and for a short period following treatments to minimize exposure to the chemicals. In certain large river treatments, small quantities of Bayluscide® may be added to TFM to reduce overall lampricide use and possibly shorten water-use advisories. Based on previous treatments, water-use advisories are expected to last 3 - 7 days.

In the case of TFM, water-use advisories vary depending on whether you use river or lake water for your household uses. TFM water-use advisories are as follows:
River Water: You should not use river water, which may contain treatment-level concentrations of the lampricides, for drinking, cooking, or other household purposes such as bathing, showering, and clothes or dish washing. Treated river water should also not be used for livestock watering, irrigation, swimming or fishing.
Lake Water: Lake water, which may potentially contain dilute lampricide concentrations, should not be used for drinking or cooking but may be safely used for other household purposes. Lake water should also not be used to water livestock.

Chemical concentrations in both the River and Lake will be monitored and you will be notified as to when it is deemed safe by the department of health to resume your normal water use.

Notification of Treatments-
You will be mailed a Water Supply Survey form approximately 3-4 months prior to a scheduled treatment that may affect you. The form and accompanying letter will advise you of our intent to treat a stream or delta that may affect you. The survey form, once you have completed and returned it, will let us know if you are a lake or river water user and allow us to plan accordingly. You will be notified again by mail of our intent to treat a stream/delta that may affect you approximately two weeks before a scheduled treatment.

Advance newspaper announcements will list the treatment schedule, affected areas, and approximate advisory durations. Signs containing the lake and stream water use restrictions will be placed at public access sites near treatment areas. If you use river or lake water for drinking and household purposes, you will also be notified by door-to-door contact during the week of a scheduled treatment and within 24 hours of when the advisory is lifted. Broadcast media will also relay when water use restrictions become effective and when they expire. A toll-free hotline, **1-888-596-0611,** will also be established for affected water-users to call for treatment schedule and water-use advisory updates**.**

Alternate Water Supplies-
If you use affected lake or river water for drinking and household purposes or for watering livestock, upon your request the USFWS will supply you with alternate water during periods when water use restrictions are in effect. Bottled drinking water will be delivered to your home, and water for other household uses will be available for filling your own containers from centrally located bulk tankers or in certain cases from local state parks. Water for livestock and any fencing to restrict livestock from access to treated water will be supplied by the USFWS. You will be mailed a Water Supply Survey prior to each control treatment that may affect you, giving you a means of requesting alternate water supplies and/or fencing to restrict livestock.

Summary-
While the project is not hazardous, it is only prudent to avoid exposure to the treatment chemicals. These water-use advisories and arrangements have been approved by state and county public health officials. Further information on the lamprey control program may be obtained from the Lake Champlain Fish and Wildlife Resource Office, contact information listed below:

U.S. Fish and Wildlife Service
Lake Champlain Fish and Wildlife Conservation Office
11 Lincoln Street
Essex Junction, VT 05452
Hotline: (888) 596-0611